CLAIMS

What is claimed is:

1. An imaging system comprising:

an imaging device assembled on a carrier; and

a first outwardly expandable element and a second outwardly expandable element mounted on said carrier, wherein said second expandable element is expandable both radially and axially, said imaging system comprising a mode of operation, wherein during expansion of said second expandable element, obstruction of the radial expansion of said second expandable element causes the axial expansion of said second expandable element to propel said carrier and said imaging device axially.

2. The imaging system according to claim 1, wherein said first expandable element is fixed axially to said carrier, and said second expandable element is slidable axially relative to said carrier.

3. The imaging system according to claim 1, wherein said carrier is formed with first and second apertures in fluid communication with said first and second expandable elements, respectively.

4. The imaging system according to claim 3, further comprising a first supply tube disposed in said carrier in fluid communication with said first aperture, and a second supply tube disposed in said carrier in fluid communication with said second aperture.

5. The imaging system according to claim 1, wherein said first and second expandable elements are expandable to different shapes.

6. The imaging system according to claim 1, wherein said first expandable element is expandable substantially radially with negligible axial expansion.

7. The imaging system according to claim 1, wherein said second expandable element is expandable generally spherically.

8. The imaging system according to claim 1, wherein said imaging device is mounted at a distal end of said carrier, distally of said first and second expandable elements.

9. The imaging system according to claim 1, further comprising a light source disposed in said carrier.

10. The imaging system according to claim 1, further comprising a suction tube disposed in said carrier.

11. The imaging system according to claim 1, further comprising a tool lumen disposed in said carrier.

12. The imaging system according to claim 1, further comprising control wires disposed in said carrier.

13. The imaging system according to claim 1, further comprising a guide member disposed at a proximal end of said carrier.

14. The imaging system according to claim 1, further comprising a linear encoder disposed on said carrier, and a decoder operative to sense linear movement of said carrier with respect to said linear encoder.

15. An imaging system comprising:

a carrier comprising a fluid passageway;

an expandable element mounted on a distal portion of said carrier and in fluid communication with said fluid passageway, said expandable element comprising a flexible sleeve, wherein in a first orientation, said flexible sleeve is folded into itself, and in a second orientation fluid at least partially fills said flexible sleeve and at least partially unfolds said flexible sleeve, so as to extend said expandable element distally outwards from said carrier; and

an imaging device disposed in said expandable element.

16. An imaging system comprising:

a carrier comprising a fluid passageway;

a jet-action head mounted on a distal end of said carrier, said jet-action head being formed with fluid jet outlets facing a proximal end of said carrier, which are in fluid communication with said fluid passageway; and

an imaging device disposed in said jet-action head, wherein fluid expelled from said fluid jet outlets propels said imaging system.

17. The imaging system according to claim 16, wherein said jet-action head is expandable and contractible.

18. An imaging system comprising:

a carrier;

at least one traction member comprising a loop extending from said carrier; and

an actuator in operative communication with said at least one traction member, said actuator moving said loop relative to said carrier.

19. The imaging system according to claim 18, wherein said loop has a helical shape that at least partially corkscrews around a periphery of said carrier.

20. The imaging system according to claim 18, wherein said loop protrudes from a side of said carrier and extends towards a proximal end of said carrier.

21. The imaging system according to claim 18, wherein said loop protrudes from a side of said carrier and extends towards a distal end of said carrier.

22. The imaging system according to claim 18, wherein said loop is expandable and contractible.

23. The imaging system according to claim 18, further comprising an imaging device disposed in said carrier.

24. An imaging system comprising:

a carrier;

a percussion device mounted on a distal portion of said carrier; and

an imaging device mounted on the distal portion of said carrier.

25. The imaging system according to claim 24, wherein said carrier comprises a guide member for a catheter-like procedure.

26. The imaging system according to any of the preceding claims, further comprising a magnet adapted to be attached to an object in a gastrointestinal tract.